



Resistin Human E. coli, Tag free

Product Data Sheet

Type: Recombinant

Source: E. coli

Species: Human

Cat. No.:

RD172016301 (0.1 mg)

Other names: Cysteine-rich secreted protein FIZZ3, Adipose tissue-specific secretory factor, ADSF, C/EBP-epsilon-regulated myeloid-specific secreted cysteine-rich protein, Cysteine-rich secreted protein A12-alpha-like 2, RETN, FIZZ3, HXCP1, RSTN, UNQ407/PRO1199

Description

Total 93 AA. MW: 9.9 kDa (calculated). Three N-Terminal extra AA (highlighted).

Introduction to the Molecule

Resistin is a peptide hormone belonging to the class of cysteine-rich secreted proteins. It is a product of the RSTN gene. Human resistin contains 108 amino acids as a prepeptide and its hydrophobic signal peptide is cleaved before its secretion. Resistin circulates in human blood as a dimeric protein consisting of two 92 amino acid polypeptides, which are disulfide-linked via Cys26. Resistin may be an important link between obesity and insulin resistance. Mouse resistin, specifically produced and secreted by adipocyte, affects skeletal muscle myocytes, hepatocytes and adipocytes themselves so that it reduces their sensitivity to insulin. Steppan et al. have suggested that resistin suppresses the ability of insulin to stimulate glucose uptake. They have also suggested that resistin is present at elevated levels in blood of obese mice, and is down regulated by fasting and antidiabetic drugs. Way et al., on the other hand, have found that resistin expression is severely suppressed in obesity and is stimulated by several antidiabetic drugs. Other studies have shown that mouse resistin increases during the differentiation of adipocytes, but it also seems to inhibit adipogenesis. In contrast, the human adipogenic differentiation is likely to be associated with a down regulation of resistin gene expression. Recent research have shown that human resistin is expressed also in macrophages and may be a novel link between inflammation and insulin resistance.

Research topic

Energy metabolism and body weight regulation

Amino Acid Sequence

MSSKTLCSME EAINERIQEV AGSLIFRAIS SIGLEQSVT SRGDLATCPR GFAVTGCTCG SACGSWDVRA ETTCHCQCAG
MDWTGARCCR VQP

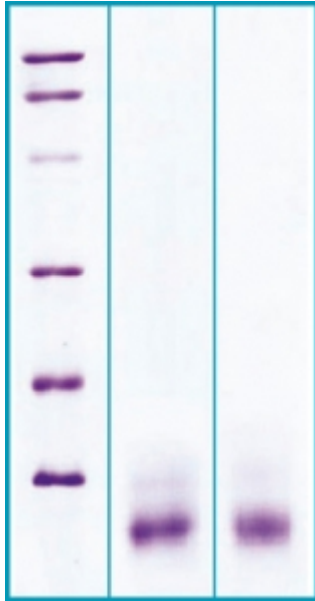
Source

E. coli

Purity

>95%

SDS-PAGE gel



- 12% SDS-PAGE separation of Human Resistin
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
 2. reduced and heated sample, 5µg/lane
 3. non-reduced and non-heated sample, 5µg/lane

Endotoxin

< 0.1 EU/ug

Formulation

Filtered (0,4 µm) and lyophilized in 0.5 mg/mL in 25mM Tris, 25mM NaCl, pH 7.5

Reconstitution

Add 25mM Tris, 25mM NaCl, pH 7.5 to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -20°C. Lyophilized protein remains stable until the expiry date when stored at -20°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL TEST to determine endotoxin level.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.

**Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium
<http://www.gentaur-worldwide.com>**